

NICOLÁS CASTILLO RODRÍGUEZ

Department of Biology, University of Kentucky, Lexington, KY

nicolas.castillo@uky.edu | [Google Scholar](#)

RESEARCH INTERESTS

I am interested in understanding the diversification and evolution of tropical organisms and have been involved in evolution, molecular systematics, phylogeographic, and population genetic studies with an emphasis on conservation. Currently, I intend to be involved in the development of new methods to study these processes from a statistical and computational perspective.

EDUCATION

2024 – Expected graduation Spring 2029 Doctor of Philosophy, Ph.D. in Biology

Department of Biology, University of Kentucky, Lexington, KY

Dissertation advisor: Rosana Zenil-Ferguson

2023 Master of Science, M.Sc. in Biology

Department of Biology, National University of Colombia, Bogotá, Colombia

Dissertation advisor: Mario Vargas-Ramírez

Title: Preliminary genetic evaluation of *in situ* populations of the Orinoco Crocodile (*Crocodylus intermedius*) in the Colombian Orinoquía

2020 Bachelor of Science, B.Sc. in Biology

Department of Biology, National University of Colombia, Bogotá, Colombia

Degree research advisors: Mario Vargas-Ramírez and Ángela Suárez-Mayorga

Title: Evolutionary lineages of *Scinax ruber* (Laurenti, 1768) in the middle and lower Magdalena of Colombia

TEACHING EXPERIENCE

University of Kentucky

2024 Fall BIO 155 Biological Research Skills Lab: Graduate Teaching Assistant

Pontificia Universidad Javeriana

2022 Diploma in University Teaching

National University of Colombia

2020 Fall 2021153: Transgenic crops: Graduate Teaching Assistant

PUBLICATIONS

- **Castillo-Rodríguez, N.**, Saldarriaga-Gómez, A.M., Antelo, R. & Vargas-Ramírez, M. (2024) First genetic evaluation of a *Crocodylus intermedius* wild population: new insights for the recovery of a critically endangered species. *Plos One* 19(10): e0311412. Doi: 10.1371/journal.pone.0311412

- **Castillo-Rodríguez, N.**, Saldarriaga-Gómez, A.M., Antelo, R. & Vargas-Ramírez, M. (2024). Population genetic structure evaluation of *Crocodylus intermedius* (Crocodylia: Crocodylidae) in Colombia: a change of perspective to improve conservation actions. *Biological Journal of the Linnean Society*. Doi: 10.1093/biolinnean/blad174
- **Castillo-Rodríguez, N.** & Méndez-Galeano, M.Á. (2017). *Ptychoglossus bicolor* (Werner's Large-scaled Lizard) Predation. *Herpetological Review* 48 (3): 658-659.

PUBLICATIONS IN PREPARATION

- **Castillo-Rodríguez, N.**, Jabaily, R., Zenil-Ferguson, R. & Aguirre-Santoro, J. Effects of sympatry on the evolution of *Puya* (Bromeliaceae) on Northern-Andean sky-island systems. In preparation for submission to the *Botanical Journal of the Linnean Society*.
- Suárez-Mayorga, A.M., **Castillo-Rodríguez, N.**, Ernst, R., Fritz, U. & Vargas-Ramírez, M. Cryptic diversity of “*Scinax ruber*” in the Andean South America: using integrative taxonomy to switch from a deep information hole into a biodiversity-based conservation strategy. In preparation for submission to *Plos One*.

PRESENTATIONS

- Aguirre-Santoro, J., Jabaily, R., & **Castillo-Rodríguez, N.** (2024). Efecto de la simpatria en la evolución de *Puya* (Bromeliaceae) en los páramos del norte de los Andes. XII Congreso Colombiano de Botánica.
- **Castillo-Rodríguez, N.**, Saldarriaga-Gómez, A.M., Antelo, R. & Vargas-Ramírez, M. (2023). Population genetic structure evaluation of *Crocodylus intermedius* in Colombia: a change of perspective to improve conservation actions. XV CIMFAUNA Congreso Internacional de Manejo de Fauna Silvestre de la Amazonía y Latinoamérica.
- **Castillo-Rodríguez, N.**, Saldarriaga-Gómez, A.M., Antelo, R. & Vargas-Ramírez, M. (2023). First genetic evaluation of a *Crocodylus intermedius* wild population: new insights for the recovery of a critically endangered species. XV CIMFAUNA Congreso Internacional de Manejo de Fauna Silvestre de la Amazonía y Latinoamérica.
- **Castillo-Rodríguez, N.**, Suárez-Mayorga, A.M., Gantiva, C.H., Fritz, U. & Vargas-Ramírez, M. (2022). The evolutionary lineages of “*Scinax ruber*” in the Magdalena Valley, Colombia: implications of cryptic species complexes in Northern South America. 3er Congreso Colombiano de Herpetología.

FIELD EXPERIENCE

- 2024 **Associate researcher to project: Evaluation of *Crocodylus intermedius* wild populations – National University of Colombia**
Colombia (Orinoquía and Amazon) – PI: Ana María Saldarriaga Gómez
- 2022 – 2024 **Herpetologist - BioAp Biología Aplicada S.A.S.**
Colombia (Magdalena Valley and Orinoquía), Costa Rica (Lowland forests), and Peru (Amazon)
- 2019 **Associate researcher to project: Integrative taxonomy of *Scinax* treefrogs – National University of Colombia**
Colombia (Magdalena Valley and Amazon) – PI: Ángela Suárez-Mayorga

CURATORIAL EXPERIENCE

2021 – 2022 **Collection curatorship assistance**

Tissue Collection Banco de Tejidos de la Biodiversidad Colombiana, Institute of Genetics,
National University of Colombia
Collection director: Mario Vargas-Ramírez

WORKSHOPS

2023 **Phylogenomics in the Andes Workshop**

Universidad Nacional de Colombia & Louisiana State University

2018 **9th Metabarcoding Spring School**

Laboratoire d'Écologie Alpine

RESEARCH FUNDING

2020 **Colombia Biodiversa 2019-II Scholarship**

Fundación Alejandro Ángel Escobar
\$1,000

LANGUAGES

English: C1 IELTS

French: Advanced - Alliance Française

German: B1 Goethe Zertifikat

Italian: Advanced - Società Dante Alighieri

Spanish: Native